

# NEWS RELEASE

Maine Department of Education, Susan A. Gendron, Commissioner

---

FOR IMMEDIATE RELEASE – October 19, 2005 after 10:00 a.m.

## **Maine's 4<sup>th</sup> Grade NAEP Mathematics Scores Continue to Rise; Reading Scores Among the Highest in the Nation**

*Subgroup comparisons show Maine making progress in No Child Left Behind objectives.*

Contact: J. H. Kennedy, NAEP State Coordinator  
207-624-6636 or [john.kennedy@maine.gov](mailto:john.kennedy@maine.gov)

This morning at 10:00 a.m., the National Assessment Governing Board (NAGB) released Reading and Mathematics results for the 2005 National Assessment of Educational Progress (NAEP), administered in Maine between January 21 and February 18 of this year.

The 2005 NAEP was the largest sampling ever of U.S. students, creating finer distinctions in the measurement of performance than in the past. At the 4<sup>th</sup> grade, 338,000 students across the Nation were sampled; at the 8<sup>th</sup> grade, 321,000. In Maine, approximately 2,500 students were sampled at each grade.

Nationally, average scaled scores for Grade 4 Mathematics (237) and Grade 4 Reading (217) were up from 2003. The **Nation's** average scaled score for Grade 8 Mathematics (278) was up from 2003, and the Grade 8 Reading (260) score was down.

**Maine's** average scaled score for Grade 4 NAEP Mathematics (241) increased by 3 points from 2003, mirroring a 4 point increase in 4<sup>th</sup> grade Mathematics on the Maine Educational Assessment (MEA) between 2004 and 2005. Maine NAEP scores for 4<sup>th</sup> grade Mathematics have increased by 9 points since 1992; MEA scores for 4<sup>th</sup> grade Mathematics have increased by 7 points in the same period. Although NAEP and MEA scales cannot be compared directly, the comparable increase in scores confirms an improvement in the performance of these students.

Maine's NAEP Grade 4 Reading and Grade 8 Reading and Mathematics average scaled scores for Maine remained stable and higher than the scores for the Nation in these subjects:

	Maine	Nation
4 <sup>th</sup> grade Reading	225	217
8 <sup>th</sup> grade Reading	270	260
4 <sup>th</sup> grade Mathematics	241	237
8 <sup>th</sup> Grade Mathematics	281	278

# NEWS RELEASE

Maine Department of Education, Susan A. Gendron, Commissioner

---

For 8<sup>th</sup> grade Reading, the percentage of Maine students *At or Above Proficient* (38%) remained significantly higher than the national percentage (29%). The percentage of Maine 8<sup>th</sup> graders *At or Above Basic* in Reading was 81% in 2005 (compared to 71% for the Nation).

Maine does not have sufficient Asian, Black, Hispanic, or Indian populations to generate scores for these subgroups. Comparing White populations across states can be misleading because of the extremely wide range of socioeconomic status in this subgroup. Maine's sample in 2005 was approximately 97% White; this subgroup represented approximately 57% of the Nation's sample. Meaningful analysis of Maine's data in relation to *No Child Left Behind* objectives requires looking at the measurable subgroups represented in Maine, including:

- Students with disabilities
- Students eligible for free and reduced price lunch
- Urban, rural, and suburban students
- Students at the lowest level of performance

## Disaggregation of NAEP Data

With the release of NAEP 2005 Reading and Mathematics results for the Nation and the states, the National Assessment Governing Board (NAGB) also introduced a new tool for investigating the results, the NAEP Data Explorer (NDE). The NDE replaces the NAEP Data Tool which provided only pre-calculated data based upon single variables, while the NDE is capable of calculating results for multiple variables (rural males participating in the free and reduced school lunch program, for instance) in real time. All Maine results presented here were produced at the Maine Department of Education using the NDE and subjected to a test of statistical significance provided by the NDE.

Since NAEP results are predictions of student performance for identified groups based upon a sampling of only a portion of those groups, the average scale scores and percentages of students at achievement levels are subject to a margin of error. If a difference between specific scores or percentages is calculated by the NDE to be not significant, this means that there is no predictable difference in the performance of the two groups whose results are being examined or of the single group over time.

For the 2005 NAEP, the following differences were calculated to be significant:

- Average scaled scores for **students with disabilities** (SD) were up significantly for **Mathematics** at 4<sup>th</sup> grade:

Math 4 <sup>th</sup> -SD	Maine	Nation	<i>Mathematics</i>
2000	210	198	
2003	215	214	
2005	222	218	

# NEWS RELEASE

Maine Department of Education, Susan A. Gendron, Commissioner

---

The increase of 12 points in Maine SD scores since 2000 paralleled the increase of non-SD scores in that time.

With increased inclusion resulting from the introduction of universal accommodations to the NAEP in 1998, 4<sup>th</sup> grade **Mathematics** scores in Maine began a steady increase at all percentiles reported (75<sup>th</sup>, 50<sup>th</sup>, 25<sup>th</sup>, and 10<sup>th</sup>) that continues into 2005.

- Students in Maine eligible for **free or reduced price lunch** (FRPL), NAEP's socioeconomic status indicator, scored significantly higher in **Mathematics** than their counterparts across the U.S., but the Nation as a whole has shown more dramatic improvement since 2000 and appears to be catching up with Maine.

FRPL	4 <sup>th</sup> grade		8 <sup>th</sup> grade		<i>Mathematics</i>
	Maine	Nation	Maine	Nation	
2000	221	208	270	253	
2003	228	222	268*	258	
2005	230	225	269*	261	

*\*The difference between 2000, 2003 and 2005 8<sup>th</sup> grade scores for Maine was not significant, according to the NAEP Data Explorer (NDE).*

Thirteen states (IA, KS, MA, MT, ND, NE, NH, MN, SD, WA, WI, VA and VT) had higher overall scores in NAEP **Mathematics** at **8<sup>th</sup> grade**; however, the ranking of many of these states changed when looking only at students who were eligible for **free or reduced price lunch**. Comparing this group of students across the Nation, only **North Dakota and South Dakota** had higher scores than their peers in Maine. 30% of the 8<sup>th</sup> graders in the 2005 NAEP sample for Maine were eligible.

Eight states (KS, MA, MN, ND, NH, NJ, WY and VT) had higher overall NAEP **Mathematics** scores than Maine at **4<sup>th</sup> grade**, but a comparison of the subgroup of students eligible for **free or reduced price** showed only those students in **Idaho, Kansas, North Dakota, Texas, and Wyoming** to have significantly higher scores than their peers in Maine. 32% of the 4<sup>th</sup> graders in the 2005 NAEP sample for Maine were eligible.

For **Reading**, no state had higher scores for students eligible for **free or reduced price lunch** than Maine's. States with **overall higher scores** in Reading were MA and NH at 4<sup>th</sup> grade and MA at 8<sup>th</sup> grade.

- Suburban** students in Maine had higher average scaled scores than the Nation in Mathematics at 4<sup>th</sup> and 8<sup>th</sup> grade:

# NEWS RELEASE

Maine Department of Education, Susan A. Gendron, Commissioner

---

Suburbs	Maine Nation		<i>Mathematics</i>	
4 <sup>th</sup>	249	241		
8 <sup>th</sup>	287	282		

For 8<sup>th</sup> grade Mathematics, the difference between Maine **urban** scores and the national average for urban scores was even greater; 283 for Maine, and 270 for the Nation. Bangor, Lewiston, and Portland (all school systems serving culturally diverse populations) were sampled extensively.

At both grades, **suburban** subgroup comparisons with other states favored Maine, but that subgroup is relatively small in Maine. Maine has the second highest percentage of rural students in the Nation. **Rural** subgroup comparisons with other states favored Maine in Reading but not in Mathematics. The difference in results between **rural and urban** subgroups within Maine were not significant for either subject at either grade

- In Mathematics, students in the **10<sup>th</sup> percentile** for Maine (students at the lowest end of the scale) scored significantly higher than their counterparts across the nation:

LOWEST SCORES	4 <sup>th</sup>		8 <sup>th</sup>		<i>Mathematics</i>
	Maine	Nation	Maine	Nation	
2003	204	196	241	228	
2005	206	199	238*	230	

*\*The difference between 2003 and 2005 8<sup>th</sup> grade scores for Maine was not significant, according to the NAEP Data Explorer (NDE).*

## The Gender Gap

For 4<sup>th</sup> grade NAEP **Mathematics**, scores increased for both females and males (239/243). The gender gap (favoring males) increased slightly from 2003 (3 to 4 points). In 1992 there was no significant difference in scores between males and females. Percentages of students at both **At or Above Proficient** and **At or Above Basic** (B&A) showed progress for males and females:

	Average Scaled Scores		Percentages At or Above Proficient		Percentages At or Above Basic		<i>Mathematics</i>
	M	F	M	F	M	F	
2000	232	227	25	20	76	71	
2003	239	236	37	31	84	81	
2005	243	239	41	36	86	83	

# NEWS RELEASE

Maine Department of Education, Susan A. Gendron, Commissioner

---

At 8<sup>th</sup> grade, the NAEP Mathematics results remained unchanged.

2000	282	281	32	29	73	73
2003	283	281	31	28	76*	74
2005	282	280	31	29	74*	74

*\*The difference between 2000, 2003 and 2005 8<sup>th</sup> grade score for Maine was not significant, according to the NAEP Data Explorer (NDE).*

For NAEP **Reading**, the gender gap (favoring females) at 4<sup>th</sup> grade widened by 2 pts since 2003; however, Maine's gender gap at 4<sup>th</sup> grade (6 pts) is among the smallest in nation.

For 8<sup>th</sup> grade Reading, the gender gap closed a little (264 M; 276 F) in 2005. Maine's 8<sup>th</sup> grade gender gap in Reading is comparable to states across the Nation. The gender gap in Reading is a worldwide phenomenon; in every country in the world, females outperform males in Reading according to PIRLS and PISA studies.

For additional data and Maine Department of Education interpretation of the NAEP 2005 results, please log on to the Maine NAEP web site after noon on October 19. To access the site, go to the Maine Department of Education web site, and click on "Standards and Assessments" at the bottom on the left. Select "NAEP" in the drop-down window.

For further information about NAEP, please contact the NAEP State Coordinator for Maine, J. H. Kennedy, at 207-624-6636 ([john.kennedy@maine.gov](mailto:john.kennedy@maine.gov)).

###